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CORPMITSUBISHI HEAVY IND
LTD**(72) Inventor: **YAMAGAMI YASUHIRO
MORIMOTO YOSHIRO
YANAGI KENICHI
YAMANE ATSUMU**(54) **COOLING DRUM FOR CONTINUOUS CASTING
APPARATUS FOR CAST THIN SLAB**

characteristic without any crack, etc., is stably obtd.

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(57) Abstract:

PURPOSE: To relax cooling condition of solidified shell of molten metal by cooling drums and to stably produce a continuously cast thin slab having smooth surface without any crack by forming dents having the specific shape, size and distributing condition on the surface of the cooling drum in twin drum type continuous casting apparatus, etc.

CONSTITUTION: The molten metal of molten steel, etc., in a tundish 1 is flowed into pouring basin part 3 between two cooling drums 2, 2 and the continuously cast thin slab 5 is continuously produced by rotating both drums 2, 2 mutually at reverse direction. In this case, the many dents 11 having circular or elliptic shape with $0.1W1.2\text{mm}$ diameter and $5W100\mu\text{m}$ depth are formed on the surface of the cooling drum 2 at $\pm 0.1\text{mm}$ the nearest mutual distance (d). Further, four or more of the dents 11 are formed so as not to continue at the above nearest distance (d). As the solidified shells of the molten metal formed by cooling of the cooling drums 2 are uniformly relaxed to the cooling condition, the continuously cast thin slab 5 having sound surface

